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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,801	11/21/2005	Masakazu Funahashi	28955.4035	7969

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EXAMINER	
GARRETT, DAWN L	
ART UNIT	PAPER NUMBER
1794	
MAIL DATE	DELIVERY MODE
04/08/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/549,801	FUNAHASHI, MASAKAZU	
	Examiner	Art Unit	
	Dawn Garrett	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 January 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2,5,8 and 10-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2,5,8 and 10-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 September 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This Office action is responsive to the amendment received January 28, 2009. Claims 1, 3, 4, 6, 7, and 9 are cancelled. Claims 2, 5, 8, 10-12 were amended. Claims 13-15 were added. Claims 2, 5, 8, and 10-15 are pending.

2. The certified translation of the foreign priority document received January 28, 2009 is acknowledged.

3. The rejection of claims 1, 3, 4, 6, 10 and 11 under 35 U.S.C. 102(b) as being anticipated by Onuma et al. (JP 05-021161 A) is withdrawn due to the amendment.

4. The rejection of claims 1-6, 10 and 11 under 35 U.S.C. 102(b) as being anticipated by Onikubo et al. (US 6,280,859) is withdrawn due to the amendment.

5. The rejection of claims 1-10 and under 35 U.S.C. 102(e) as being anticipated by Seo et al. (US 2004/0137270 A1) or under 35 U.S.C. 102(a) as being anticipated by Seo et al. (EP 1437395) is withdrawn due to the perfected foreign priority date.

6. The rejection of claims 1-10 and 11 under 35 U.S.C. 103(a) as being unpatentable over Ishimura et al. (JP 10-88122) is withdrawn due to the amendment.

7. The provisional rejection of claims 1-12 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-7, 9, 10, and 13-16 of copending Application No. 11/269,661 is withdrawn due to the abandonment of the '661 application.

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 21, and 22 of copending Application No. 10/617,397. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds of the instant claims are within the definition for the amine compounds of an EL device of '397. X3 of '397 may be pyrene. Ar5 and Ar6 of '397 may be substituted aromatic groups. Ar15-A18 of '397 are substituent groups that may be present in a number of 2 or greater.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

10. Claims 1-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 28, 29, 31, 38, 39, 41, 49 of copending

Application No. 11/207,933. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds of the instant claims are within the definition for the amine compounds of an EL device of '933. X3 of '933 may be pyrene. Ar5 and Ar6 of '933 may be substituted aromatic groups. Ar15-A18 of '933 are substituent groups that may be present in a number of 2 or greater.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

11. Claims 1-10 and 12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-7 and 10 of copending Application No. 11/547,233. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds of the instant claims are within the definition for the amine compounds of an EL device of '233. X of '233 may be pyrene. Ar2 and Ar3 of '233 may be substituted aromatic groups. Ar1-A4 of '233 are substituent groups that may be present in a number of 2 or greater.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

12. Claims 1-10 and 12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 5, 9, 10, 14, 18 and 22 of copending Application No. 11/761,437. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds of the instant claims are within the definition for the amine compounds of an EL device of '437. X3 of '437 may be

pyrene. Ar5 and Ar6 of '437 may be substituted aromatic groups. Ar15-A18 of '437 are substituent groups that may be present in a number of 2 or greater.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

13. Claims 1-10 and 12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-8, 10, and 12 of copending Application No. 11/547,306. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds of the instant claims are within the definition for the amine compounds of an EL device of '306. X of '306 may be pyrene. R20 and R21 of '306 may be substituted aromatic groups. Ar1 to Ar4 of '306 are substituent groups that may be present in a number of 2 or greater.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

14. Claims 1-12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8 of copending Application No. 11/596,299. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds of the instant claims are within the definition for the amine compounds of an EL device of '299. Ar1-Ar4 of '299 are substituent groups that may be present in a number of 2 or greater.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

15. Claims 1-12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of copending Application No. 11/575,441. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds of the instant claims are within the definition for the amine compounds of an EL device of '441. Ar1-Ar4 of '441 are substituent groups that may be present in a number of 2 or greater.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

16. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

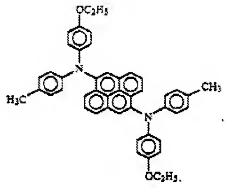
17. Claims 2, 5, and 10-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2 recites m and n may both be zero, but then sets forth "with the proviso that at least one of A1 and A2 contains any of..." various groups. It is unclear if formula II requires that at least one of m or n is at least one, since it appears there must be at least one of A1 or A2 present on the compound. Clarification and/or correction are required.

Claim Rejections - 35 USC § 102

18. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

19. Claims 2, 10, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohnuma et al. (US 5,153,073). Ohnuma et al. discloses an EL device having at least one organic layer between the anode and cathode comprising an amine compound according to formula I (see claim 1, col. 14). A specific amine includes the following (see col. 22, lines 40-53):



Further organic layers are included in the device per claim 11 (see col. 11, lines 37-44).

Claim Rejections - 35 USC § 103

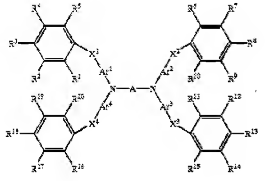
20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

21. Claims 2, 5, 8, and 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Onikubo et al. (US 6,280,859; see entire document).

Onikubo et al. discloses the following general formula of a compound for a layer of an EL device (see abstract):

[3]



Ar1 to Ar4 comprise a substituted or non-substituted aromatic group or a substituted or non-substituted fused aromatic group (see col. 2, lines 47-50), which reads upon the instant A1 and A2 groups as substituted aryl groups. "A" in the formula may be a substituted or non-substituted fused aromatic group (see col. 2, lines 34-38). A specific "A" group may include pyrene groups (see Table 1, col. 7).

With regard to instant formula II, a cycloalkyl group may be included as a substituent per "the proviso that at least one of A1 and A2 contains…a substituted…cycloalkyl group" (see B-15, col. 43).

With regard to instant formula II' and the requirement at least one of m or n is at least 2, the Ar1 to Ar4 groups taught by Onikubo may be substituted (see col. 2, lines 47-50 and see also, "B-19", col. 44).

Onikubo does not expressly *exemplify* a compound according to instant formulas II or II'; however, Onikubo clearly teaches a general amine formula encompassing all of the required substituent groups set forth in the instant claims. It would have been obvious to one of ordinary

skill in the art to have formed an amine compound comprising the substituent groups as described above and to have used the compound in a device with a predictable expectation of success in achieving a well-operating device, because Onikubo clearly teaches such a compound having the selected substituent groups is suitable for forming the EL device.

With regard to claims 12 and 15, Examples "96-108" described at col. 195 set forth a device comprising a light emitting layer of Alq and a compound of Table 3 in a ratio of 100:3 (see also, col. 180, lines 15-23 describing a mixed layer). It would have been obvious to one of ordinary skill in the art at the time of the invention to have made a device having the amine compound in a layer in an amount of 3%, because Onikubo clearly sets forth selecting one of the disclosed amine compounds for forming this type of layer in an EL device. One would expect a compound according to the general formula at an amount of 3% to result in a device having high brightness characteristics as set forth in the examples.

With regard to claims 11 and 14, Onikubo describes a multi-layered device (see col. 179, lines 13-39).

Response to Arguments

22. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Applicants argue Onikubo discloses a broad formula but none of the exemplified compounds meet the elements of applicants' claims. The examiner notes that non-preferred embodiments can be indicative of obviousness (see *In re Lamberti*, 192 USPQ 278 (CCPA 1976); *In re Boe*, 148 USPQ 507 (CCPA 1976); *In re Kohler*, 177 USPQ 399 (CCPA 1973)), and

a reference is not limited to working examples (see *In re Fracalossi*, 215 USPQ 569 (CCPA 1982)). In addition, "[A] reference disclosure must be evaluated for all that it fairly [teaches] and not only for what is indicated as preferred." *In re Bozek*, 416 F.2d 1385 (CCPA 1969).

Conclusion

23. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dawn Garrett whose telephone number is (571) 272-1523. The examiner can normally be reached Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on (571) 272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dawn Garrett/
Primary Examiner, Art Unit 1794